

VOL. 2

MARCH

NO. 10

MONTANA WILD LIFE



OFFICIAL PUBLICATION OF THE
MONTANA STATE FISH AND GAME DEPARTMENT

The Old Frying Pan

Submitted by Mrs. Bert Mendenhall
Holter Dam, Montana

*You may talk of your broilers, both single and double,
Your roasters and toasters; they're all lots of trouble.
But when out in the hills, just find if you can,
Any kind of a dish like the old frying pan.*

*Over the campfire you don't need a stove;
Out in the hills, the place we all love;
Such hot cakes they never were tasted by man,
With many the thanks to the old frying pan.*

*When the trout are all fried to a rich golden brown,
I know old epicures would look with a frown
At the meal set before me—dispute it who can—
With naught for a plate but the old frying pan.*

*With the venison cooked, the potatoes all fried,
Bannocks like bed-quilts, with coffee besides,
You could eat till you busted, die satisfied, man.
Was dish e'er invented like the old frying pan?*

*Many a miner, in the good days of old,
'Way back in the foothills a-searching for gold,
Deep in some creek-bed, for the rich yellow sand
Has panned out a grub-stake with the old frying pan.*

*There's been cattle rustlers, when in a great hurry
Used no other iron, but why should they worry?
For many and many and many the brand
That has been blotched out with an old frying pan.*

*So your praises I'll shout, both far, wide and high,
That you're the best dish, till the day that I die.
Why, there's many a woman "cleaned up" on her man
With no other club but the old frying pan.*



MONTANA WILD LIFE

The Official Publication of The State Fish and Game Commission

VOL. 11.

HELENA, MONTANA, MARCH, 1930.

NO. 10.

For Fish and Game An Editorial

By Floyd L. Smith

WHEN commercial captains, industrial leaders and outstanding representatives of every walk of life of Montana recently gathered at an eventful two-day session at the state capitol at Helena, organized the Montana Development Congress and perfected fundamental plans for placing Montana's resources before the world, they embarked upon a mission of merit such as has seldom been undertaken in the Treasure State. Significant association of men who sacrificed time and money to participate in this great gathering, with outstanding industries of the state, causes the congress and its proposed activities to occupy a position of enviable esteem. The plan, emanating from discussion at the conference, is simply that of presenting Montana in a proper light before eastern investors, farmers, operators of factories, tourists and eventual settlers. Much of this campaign will be devoted to advertising in publications reaching prospective residents.

While men of might and power are discussing meritorious matters involving millions, while they are outlining campaigns of magnitude as that proposed by the Montana Development Congress, they are giving their best that Montana may move forward. Yet while these intense efforts are in their embryonic stage, features of vital importance may be inadvertently overlooked. Hence, this editorial suggestion is offered in constructive, wholesome manner on behalf of upright Montana sportsmen, whose dollars and endeavors are making possible the vast program of wild life conservation in which the State Fish and Game Commission is now engaged.

Springtime is officially here. Eastern tourists are turning their eyes toward Montana's playgrounds. Many of these tourists are looking over the lay of the land in search of homes. They are thrilled by Montana's magnificent distances, her gigantic mining industry, her strides in agriculture, stock and shop industries, her snowclad peaks, babbling brooks and turbulent rivers. All of these things enter into the picture imprinted on the mind of the visitor to whom Montana extends her hospitable arms.

Yet when all is said and done, when the debating and argument is over, when the mid-west farmer who is temporarily a tourist pitches camp along a crystal Montana stream, ambles out before the evening meal and returns with a mess of such trout as he has never before seen, he unwittingly murmurs: "This state is good enough for me." He has been made a convert without perusal of eastern advertising, without the necessity of reaching him through beautified literature and without personal contact. Funds expended by Montana sportsmen which make possible stocking and restocking that stream that residents as well as visitors may enjoy God's heritage, have made another friend.

Hence in consideration of these vital facts, the Montana Development Congress may well cooperate in conserving the fish and fowl, feathered friends and big game and include them as the magnet which first attracts the visitor, who later decides to make Montana his permanent home.

Montana is credited with attracting the third largest tourist expenditure in the United States and Canada. The Montana Automobile Association declares that the average year sees \$300,000,000 spent by some 6,000,000 tourists to enrich Montana and the northwest. Wealth follows in the wake of this business. Even the most humble traveler who totes his bulky heap on the running boards, his coffee pot and skillet under the front seat, must shop for supplies. Yet, remove the fish from Montana's streams, the feathered fowls from hills and forests, the elk, deer, and the protected bison, mountain sheep, goats—and what becomes of the tourist business?

When the Verendryes, French fur traders from Canada, the first white men to set foot on what is now Montana, came within sight of the Big Horn mountains in southeastern Montana in 1743, they came in search of furs. They lived on fish and game. When Captains Lewis and Clark, intrepid explorers, came to make a reconnaissance of the northwest, they crossed the state from east to west in 1804-5. They, too, enjoyed the paradise of wild life. Gold miners came in the '60's, the wagon trains and prairie schooners followed and then began inroads on wild life, which are definitely traceable to the necessity for such conservation and restocking made possible by law enforcement in which loyal sportsmen have entered in wholehearted manner.

Montana's streams must be kept stocked with fish if state prestige as a tourist goal is to be maintained. Fifteen hatcheries operated by the State Fish and Game Commission are producing some 40,000,000 trout and grayling annually to keep abreast of the drain. The new state game farm will in like manner do its share toward restocking game and game land, field and forest. Montana has an area of 146,997 square miles or approximately 94,078,000 acres. These acres are awaiting conscientious settlers. Yet the farm located within ideal distance of field, forest or stream, where fish and game abound, is that which is most desired.

During 1929 Montana's fishing and hunting licenses mounted to new records, from the standpoint of both resident and tourist. Every Montana angler pays \$2 into the fish and game fund to make bigger and better fishing and each year sees more fishermen, more hunters and a greater drain upon the heritage of boys who are pals of Montana days. What's the answer? Efforts of Montana's State Fish and Game Commission, financed by the meager sum paid for resident hunting and fishing licenses—only \$2 for 12 months of sport—have given Montana the largest warm-water pond culture station in the world at Fort Keogh, blazed the trail by establishing the first and largest biological survey station for the study of fish and animal food and diseases on the shores of Flathead Lake in cooperation with the state university, planted duck food throughout the state, set aside game sanctuaries, and established rearing ponds. These strides are being made to make Montana more interesting to the men and women who seek a home in the Land of Shining Mountains.



Taming Montana Mountain Sheep

By DEPUTY GAME WARDEN WILLIAM J. DORRINGTON

PRIOR to the creation of Glacier National Park in Montana, that portion east of the Continental Divide and then known as the ceded strip, was probably the greatest hunting area in Montana. This area was a great mountain sheep and grizzly bear country and yearly sportsmen from New York and London availed themselves of these conditions and, guided by Jack Munroe, who still lives in Montana, always got their big horn and grizzly. Today under Park supervision this same area still abounds with wild life.

The mountain sheep, wildest and shyest of them all, when this country became a park, has now through contact with man and having been hay fed at certain points during severe winters, become so tame that pictures of them are secured, although in remote parts of this park, where few ever travel, mountain sheep are apparently as shy and wild as ever.

The first feeding of these sheep was not really from a point of necessity, but rather to tame by feeding and thus try to hold them close to a highway, where tourists could view them. This certainly has been accomplished, as any one who has visited this country can testify.

During a fall visit to the park by Ernest Thompson Seton, well known author and naturalist, I was detailed to accompany Mr. Seton and remained with him for eight days. This was after the park season, and we camped close to the summit of the Continental Divide to be as close as possible to the mountain goat, for Mr. Seton was at this time making a study of the goat.

During our stay many wild life stories were told. It was then that Mr. Seton spoke about the increase of the mountain sheep and with the increase would come the necessity of feeding them. I spoke of the desire of the hotel company of having them fed, for the purpose of seeing if by contact and feed we could not hold them in the same area during the tourist season.

Mr. Seton agreed that as soon as he got back to Washington, D. C., he would see if money could be procured for the purchase of hay. This he was able to do, and the hotel company left with us 200 pounds of salt. This we placed close to the highway, which in time became a salt lick and was much used. The hay was brought in and stored. Later the road was blocked with snow and the sheep began to come down.

Hay was at first put out probably half a mile from the cabin and as sheep came to it it was put closer and closer until within the first two months they were practically eating out of our hands.

Ranger F. M. O'Brien was stationed at this camp during this time and periodically I would visit him through the winter and was more than sur-

prised at the gentleness of these sheep in so short a time.

It was during one of our many trips to visit this station that Frank O'Brien told me he had a great surprise for me and would show me the following morning. He told me what he would do and I was rather doubtful.

Early next morning and before we had breakfast we went outside the cabin and about seventy-five mountain sheep were scattered over the mountainside.

Frank let out a series of shrill whistles. Instantly every sheep raised its head. Frank continued to whistle a short time, then one ram started slowly down towards the cabin and in a few minutes all were in a mad run. Frank broke out a bale of hay and then feed was on. Our experiment has proved successful as these sheep lambed close by and brought their lambs down with them, which in turn became more gentle. The accompanying pictures on the opposite page from my collection show sheep in different stages of feeding.

FAMILIAR MILEAGE

Friend (to motorist): "What! Three thousand miles in her this spring? Some tour!"

Motorist: "No tour at all. Just back and forth to the grocer's for things my wife forgot."

The Wild Horse

NANCY R. MARQUES
Hot Springs, Montana

In the days almost forgotten,
In a time when guns were law,
Roamed a wild horse o'er the mountains,
Brave, defiant, lord of all.
Rope o'er hand had never touched him,
His was freedom wild and bold,
He knew where the grass grew tallest,
Knew each lick and water hole.
Then one day his wild eye flashing
Caught a dust cloud in the air,
These he'd learned were danger signals,
Something coming near his lair.
Soon he found himself surrounded,
While his head he proudly tossed,
Then he fought a vicious battle,
'Twas a battle that he lost.
He had lost, and man had conquered,
Gone his freedom with the stars,
And he leaned against corral poles,
As a prisoner 'gainst the bars.
Now he felt the branding iron,
Terror through his body ran,
They broke his heart and spirit,
Made him do the will of man.
Gone his glory as a wild horse,
Gone his freedom in the hill,
But the sadness of his passing
Is a memory with us still.

Low Water at Nine Pipe Reservoir



WISDOM of Montana's State Fish and Game Department in closing streams to fishing on November 1 because of extreme low water and the torrid summer and fall, has been justified by examination of waters where landlocked game fish have been saved. Here's a picture of Nine Pipe Reservoir, the duck hunter's paradise

during ordinary seasons and the play resort for anglers and their families in search of sunfish, bass, perch and trout. The reservoir is shown at its low water stage. The picture is submitted by Deputy Warden Jack Goldsby, who asserts that millions of fish remaining will be saved during the winter with proper attention.

In Montana's Mountains ♦♦



1



2



3



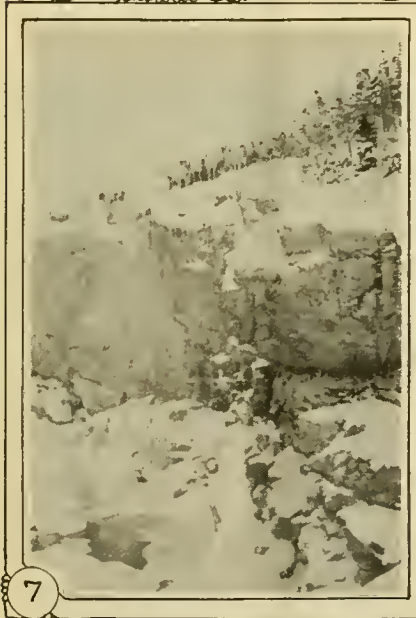
4



5



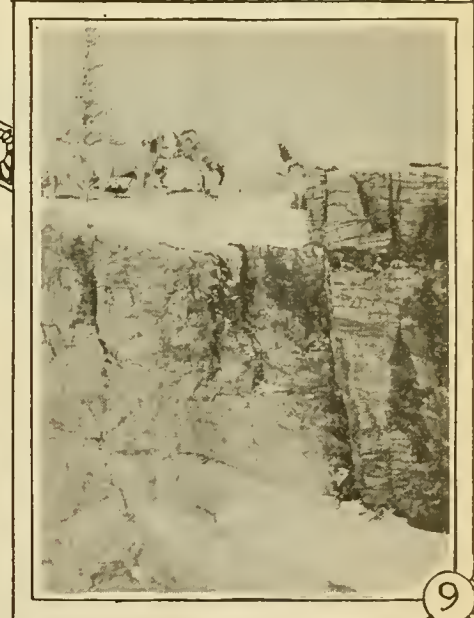
6



7



8



9

- 1—The hardy old rams were among the last to be tamed.
- 2—Old Man Sheep became gentle during the winter because of having been fed. They are shown in the picture peering into the camera, unafraid and waiting for another bale of hay.
- 3—Rams and ewes in this picture are a little doubtful about coming in for their meal.
- 4—This old fellow has his trunk and grip packed and is on the way.
- 5—While these sheep were being fed they made friends with the camp dog, dissipating the old theory that a mountain sheep never will permit itself to accept civilization.
- 6—This old ram made himself perfectly at home and was often seen on the highways.
- 7—Hay was first distributed on this rocky promontory and the sheep were at first wary about approaching it.
- 8—These mountain sheep finally became so tame that they climbed the roof of the cabin, woke the ranger, F. M. O'Brien, and politely asked for their morning hay.
- 9—These fellows were torn between fear and confidence.

Wily Pheasant Passes the Buck

By JOE B. HALM of Missoula

IT MAY have been the unusual behavior of some blackbirds in the cattails which caused me to circle a small pond near Nine Pipes Bird Refuge last summer.

P-r-r-r. A Chinese pheasant hen rose out of the tall weeds with a roar like a miniature airplane, zigzagged across the stubble and disappeared over a rise of ground in an adjacent field. I always experience a peculiar thrill,—a sort of momentary paralysis—in the getaway of these big beautiful birds. I stepped cautiously forward. Just as I had expected, there was a nest, but instead of the usual clutch of pheasant eggs, I found four pheasant and an equal number of duck eggs. The nest was crude, such as either a duck or pheasant might claim prior to the incubation period. I calipered the eggs. The smaller were pheasant, the larger ones, considering their size and the location of the nest, were undoubtedly of a pintail duck.

I recalled that nest parasitism is practiced by several groups of birds. The cowbird and cuckoo, I knew, were parasitic and often did their sitting by proxy, but I was not so sure that either the pheasant or duck had such inclinations. The evidence thus far was wholly circumstantial.

Nevertheless, here was a situation worthy of investigation. After noting

carefully all the details, I was still undecided as to which was the rightful owner. My conclusion was that possibly a pheasant had inadvertently accepted an abandoned duck's nest.

This theory was exploded upon my return that afternoon. As I cautiously approached, a pintail hen slipped noiselessly out of the nest. A count of the eggs showed the score now to be five to four in favor of the duck. The fact that the nest was not down-lined convinced me that the duck at least had not yet begun to incubate the eggs.

After photographing the nest, I visited several others of my acquaintance in the neighborhood.

While blundering more or less aimlessly through the stubble, I startled a setting mallard hen. While examining this well-lined work of art, I marveled at the unusual number of eggs.

Then I had my second surprise that day. I counted thirteen duck and three pheasant eggs. There was no mistaking the ownership of this nest. It was neatly lined with duck breast down, the eggs were warm and polished, indicating that incubation was well advanced. The pheasant eggs were a light green, slightly darker in color than the mallard's and noticeably smaller. I promptly began a careful and systematic search of the immediate neighborhood, but found no more parasitized nests.

We watched events in these two nests which were not more than a quarter of a mile apart. As incubation progressed in Mrs. Mallard's household, she gradually ejected all but one of the pheasant eggs and six of her own. Had I not caught her in the act, I would have thought some prowler was robbing her. Standing in the nest, tail pointed skyward, she carefully worked round and round, turning the eggs over and over with her bill.

Finally, after much listening and deliberation, she selected the undesirable one and nosed it gently out and with her mandibles rolled it into the stubble out of sight. It took several days to weed out the eight undesirable eggs. I examined all that I could find and each proved to be infertile.

Nature has endowed this bird with a keen instinct for correctly distinguishing the live from the dead eggs. I do not believe she would have removed the pheasant eggs had they shown signs of life.

A few days later I found the nest empty. All the eggs had hatched, including the pheasants. I saw the little duck family all well and happy in the cattails nearby. If the pheasant who duped the duck into relieving her of family responsibility hoped to reap results, it was misplaced confidence for while Mrs. Mallard did act as foster



—Photos by Joe B. Halm, Missoula.

At the left—The pheasant eggs numbered seven which, with the ten pintail eggs, made a total of 17 in the duck's nest.
Center—The pintail hen on her nest near Nine Pipe Reservoir.
At the right—The mallard nest which contained thirteen duck eggs and three pheasant eggs.

mother to the extent of incubating the eggs, she certainly did not tarry long after the last little arrival left the shell. Her own downy nestlings were already clamoring to go see the world so after some coaxing she probably left her pink little fosterling in disgust with the admonition to follow as soon as it could.

The pintail eggs increased in number daily. While watching Mrs. Pintail from a convenient blind one day, a pheasant hen suddenly appeared in the grass just beyond her. Mrs. Pheasant was stepping cautiously, extending her neck, keenly alert as if fearing an ambush. She walked directly to the nest.

When scarcely two feet from it she became suddenly aware of Mrs. Pintail's presence, then as if caught in an act of mischief, she raised her head and walked hurriedly away, looking neither to right nor left.

Whether this was a ruse on her part to disclaim ownership of the nest or simply timidity, I can not say. The pheasant ordinarily is anything but timid. Perhaps half an hour later, Mrs. Pintail left, after first covering the nest lightly with straw. She walked to the little pond and tidied up a bit, after which she flew away. I watched for the pheasant's return, but was disappointed. Neither she nor the duck returned that day.

I returned a few days later to find the nest covered with soft downy duck feathers. The Chinese pheasant eggs now numbered seven, which, with the ten duck eggs, made a total of seventeen.

Anxiously I crept into my blind and waited. Soon Mrs. Pintail returned from her favorite pond and after satisfying herself that the coast was clear, settled upon the nest. She never left it thereafter except for short periods.

This bird showed little of the intelligent concern for her own eggs with which I would have credited her. Some birds submit to being duped even though the size and color of the eggs differ. All the eggs evidently proved fertile for she did not eject any, and one day after an absence of two days I was nearing the little pond when I saw Mother Pintail, closely followed by her brood of ten babies, making for the tall reeds on the far side. I was too late, every egg had hatched.

I searched about for some clue as to the fate of the seven little pheasants but again the mute empty shells told no story other than that they had hatched.

I am unable to state whether either of these ducks was aware of the impostures practiced by the feathered arch-parasite, the Chinese pheasant, or whether through innate simplicity or inadvertent coincidence, both duck and pheasant just happened to use the same nest, and the pheasants later peaceably relinquished them to the ducks. This seems probable, especially since I know that one pheasant at least saw the duck on the nest and shrewdly passed her by without any protest.

Father: Was Jack intoxicated when he came home last night?

Daughter: I didn't notice, but he asked for a mirror so he could see who he was.

Hunter Bags Lion Cubs In Den

C. E. BEEBE of Columbia Falls received special commendation for the killing of a female mountain lion and the capturing of her five kittens alive after a hazardous entrance into a den on the Wolf Creek preserve in the report of the state livestock, fish and game and biological survey on predatory animals, received by Robert H. Hill, State Fish and Game Warden.

Beebe was called into the district when the ranger reported an unusual slaughter by lions among elk and deer. The second day out he picked up the trail of the old female lion and put his dogs, a cross of foxhound and bloodhound, on her track. In less than three hours he had her treed and killed.

After he killed the lion he discovered she was nursing young. He skinned the animal and took her back trail across Wolf Creek to Elk Mountain and followed it to her den. The den was so small at the entrance that he was unable to crawl in with his heavy clothes and besides he needed a gunny sack and some snares. He returned to the Fairview Ranger Station, about 22 miles, got his supplies and returned to the den.

Removing his heavy clothes, he crawled back about 40 feet through the

crevice in the solid wall of the cliff, lit his candle and started to catch the lion kittens with a wire snare. The den was about two feet wide, five feet long and five feet high. After getting the little cats in the sack he backed out, dragging them after him. The kittens weighed six to eight pounds each and were carried about two miles until Beebe reached a spot where he chopped down a lodge pole tree with his hand ax and made a sleigh. With 45 pounds on his back and pulling the sleigh with the five kittens and the hide of the mother lion, it was all he could do to make the top of the divide, where he stopped for the night, feeding the kittens on heated canned milk.

The next morning he hauled the load to Trego, 20 miles, and then took the train for Columbia Falls, from where he shipped the young lions to R. E. Bateman, predatory animal inspector, at Billings. The lions will be sold to museums.

Beebe often spends weeks at a time away from civilization with his snowshoes and pack outfit. During the time he is on his trips he camps at night in a silk tepee if no other shelter is available. He gets supplies from caches of forest rangers, to which he is entitled.

They're Under Water



MANY photographers have tried and tried to take pictures of fish and other images under water. Here's a catch of beauties, tied together with a string, floating in the waters of Two Medicine Lake, where the water is clear as crystal. If amateur photographers doubt the underwater problem, it might be well to begin looking forward to a series of tests on next summer's vacation in the hills.

The Same Old Story

AFTER listening in camp and working on his own imagination, a Montana hunter figured out that there are just exactly a dozen different alibis for the Hungarian partridge hunter who didn't get any birds. Here they are:

"The foliage was so thick that every time a bird flushed it was hidden be-

fore you could get your gun up to your shoulder."

"The birds were wild as hawks. They got up so far ahead that you'd need a rifle to bring them down."

"The woods were so dry that every time you moved your feet the leaves crunched and warned the birds of your approach."

"The woods were so wet that the birds sat tight and wouldn't get up until you kicked them under the chin."

"The dog couldn't work in the dry woods, account of there being no dampness to hold the scent."

"The birds were badly scattered. It's foolish to open the season before the first break of cold weather bunches the birds."

"My shells were no good. I'll never use a scatter load again."

"I made the mistake of trying to shoot partridge with a duck load. After this I'll use scatter shells."

"There were too many hunters in the woods. They made the birds wild."

"There weren't enough hunters to keep the birds moving. They'd drop down in the thickets and sit tight, whereas if there'd been more hunters rambling around the birds would have been flushed again."

"Our dog was no good."

"There aren't any partridge. It was a mistake to open the season."

So there you are. Take your choice. Every alibi is good.

Hubby: "I can't raise \$100—that's all there is to it. I received a notice this morning from my bank about being overdrawn."

Wifey: "Well, can't you try some other bank? They can't all be overdrawn."

MONTANA STATE FISH AND GAME COMMISSION

COMMISSIONERS.

Thomas N. Marlowe, Missoula, Chairman.
G. T. Boyd, Great Falls.
Joseph L. Kelly, Anaconda.
W. K. Moore, Billings.
E. A. Wilson, Livingston.



ROBERT H. HILL, Helena
State Fish and Game Warden
Secretary.

MONTANA WILD LIFE

The Official Publication of the State
Fish and Game Department.
Published Monthly at Helena, Montana.

FLOYD L. SMITH, Editor.

Subscription Rate \$1 per Year—15 Cents per Copy
Advertising Rates on Application.



Copy for advertisements subject to approval of State Commission and must be in the hands of the editor at the State Capitol building, Helena, on the 15th of the month preceding publication date.

VOLUME II. MARCH, 1930. NUMBER 10.

GAME MUST EAT TO LIVE

THIS is the time of year, with the approach of spring-time, when a tremendous amount of good can be done by everyone who goes afield in helping game birds to solve their greatest problem: that of securing proper food during the months when the ground is covered with snow. Sportsmen, boy and girl scouts, school children, rural mail carriers, in fact anybody who goes into the fields and woodlands should do their part in providing additional food in the shape of fine grain or scratch feed for the game birds. Likely feeding places occur in any sheltered spot. Under the low limbs of evergreen trees there is always a thin place in the snow that is a favorite refuge and feeding ground for native birds.

It is folly to expect the State Fish and Game Commission to take care of all of this winter feeding and the sportsmen's organizations can only care for limited areas. Boys in every locality should be interested in winter feeding. Such work on their part will not only help save the game the state has taken such pains and expense to propagate, but it will help the boys grow into better citizens. The boy who has spent a winter helping feed game and save it from starvation is not likely to grow up into a game hog or a law-breaker.

Be careful of your axe; also be careful with it. Don't swing it until you are sure it will not catch on a branch overhead or behind you. Keep your feet well back when you are chopping.

VIOLATOR FINED \$2,000

PAUL JONKERS of Lake Geneva, Wisconsin, according to a dispatch from Redfield, South Dakota, liked pheasants so well that he just could not wait a few days until the season opened, and when caught as he was about to leave the state in a high powered auto he had one hundred and fifty pheasants, practically all of them canned in half-gallon and gallon jars. The dispatch states that this man and his wife were visiting relatives who asked them to refrain from hunting until the season opened, and that the birds were to be used in throwing a big banquet for a number of wealthy patrons of a summer resort operated by Jonkers near Lake Geneva. Judge Fisher in passing the maximum fine of \$2,000, one of the largest ever assessed, severely reprimanded Jonkers and said that it was on account of his attitude, and the attitude of men like him, that the law was in disrepute.

Don't fail to take a good compass with a lock needle on your fishing trip, and become familiar with it before you start. Don't wait until you are lost to do this.

MONTANA GRAYLING IN CALIFORNIA

MONTANA has for decades been looked upon by visiting anglers as the home of the grayling. Its fame has traveled far. During the recent winter many Montanans have visited the aquariums in California where Montana game fish are displayed. The remarks of Alvin Seale, superintendent of the Steinhart aquarium at San Francisco, are interesting. He says:

"Izaak Walton called the grayling 'the Flower of Fishes.' It is just that. The only place in the Union where the grayling is propagated is at Anaconda, Montana, where millions of eggs are taken each year. There fish spawn in May and June. The eggs are placed in hatching jars, such as are used for hatching whitefish eggs. They have, however, been hatched with good success in wire baskets of small mesh.

"Dr. Treece, superintendent of hatcheries for Montana, writes: 'Another difficulty about the propagation of the grayling is the fact that we have never found any form of food for the little fellows, and as a result he must be taken out and planted before the little food sac is absorbed.' It was to remedy this condition that research regarding food for young grayling was inaugurated at the Steinhart aquarium, in Golden Gate Park, San Francisco.

"On May 19, 1924, we received at the Steinhart aquarium about 4,000 grayling eggs in eyed condition. They were placed in the hatchery and by May 30 they were all hatched. As soon as the food sac was absorbed we began feeding them, trying each of the following: boiled egg squeezed through a cloth, powdered shrimp, meat juice, sour milk curd, fresh fish ground to powder, liver and beef heart. None of these could be regarded as a success and the death rate mounted rapidly. Within four months every one of these young grayling were lost.

"On June 24, 1929, the Montana Department of Fish and Game sent the aquarium about 30,000 grayling eggs, all of which hatched in fine condition. We at once got in touch with W. H. Shebley and offered to the Division of Fish and Game about 25,000 of these young grayling for planting in such places in California as he might choose. We suggested that Mirror Lake in the Yosemite Valley as closely approximating the conditions of Georgetown Lake, in Montana, where the eggs were secured. The young grayling were accordingly taken to Mirror Lake by the representatives of the division's fish cultural bureau and planted on July 3, 1929. About one week later a second lot of perhaps 5,000 young were sent to the Mt. Shasta hatchery for planting in northern California. The remaining fish were retained at the Steinhart aquarium for experiments in feeding with live food, large quantities of Daphna, Infusoria and small brine shrimp being used for this purpose, but without success. The problem of feeding young grayling is still one awaiting solution." They thrive in Montana's crystal waters.

It pays to go straight—look what happened to the corkscrew.

THIS MONTH'S COVER

FRIENDS of MONTANA WILD LIFE have been kindly in their comment on the cover designs selected for the monthly publications. The picture utilized on the cover of the March edition was made possible through activities of P. G. Gutensohn, secretary of the Whitefish Rod and Gun Club. The photograph of the mountain sheep was taken at Glacier National Park feeding grounds, while the rams were waiting for their winter rations.

If thirsty and without water, put a small stone or a button under your tongue. It will keep your mouth moist.

GAME DEPARTMENT FOR MISSISSIPPI

MISSISSIPPI is the only state in the Union without a state department for the administration of its fish and game laws. The state has a code of laws regulating the taking of game and providing open and closed seasons, bag limits, etc., but has no state agency for the administration or enforcement of its laws, the enforcement being left to county commissioners and sheriffs. It has been repeatedly demonstrated in other states that a state department responsible for the administration of the wild life of the state is essential to efficient supervision and practical enforcement of laws. Efforts have been made in previous legislatures to secure such a department but without success.

The legislature of the state, which is now in session, is considering an excellent measure similar to that of Montana. It provides for the creation of a commission of three members, each to be appointed for two, four and six years, respectively, so that the entire commission will not go out of office at one time. The commission is authorized to appoint an executive officer who shall have direct charge of the administration of the department under the authority of the commission. Members of the commission receive no salary.

Pursuant to the most modern and approved ideas of administration the commission is given authority to make regulations opening and closing seasons as emergency conditions might require after investigation and public hearing. Regulations established by the commission are to have the effect of law.

A hunting and fishing license system is established, the income from which is to be safeguarded to be used for no other purpose except the administration of the fish and game laws and the department has authority to use the funds so accruing for establishment of sanctuaries, fish hatcheries and game farms.

A human life is worth more than all the game in America—see clearly before shooting.

SPRING FIRES DESTROY BIRDS

EVERY spring multitudes of small birds and animals of Montana are either killed or driven from their chosen habitats by the numerous fires intentionally set to burn over farm, waste or wood lands. Many forms of wild life become especially attached to a given territory, at least for the period of the spring and summer seasons, and when the cover is burned away both the home and the source of food supply may have been destroyed.

Farmers of the prairie sections of the country have long held to the custom of burning marshy pasture and meadow lands in the spring and probably always will, but if they would do their burning early, immediately after the snow goes off, a minimum of damage would be done. When the burning is delayed until late in April or early May many nests of prairie chickens, wild ducks and quail as well as ground-nesting non-game birds are destroyed.

Even city park authorities seem to take little account of nesting sites for birds as it is a common practice to burn the winter's accumulation of dead leaves, grass and other combustible material in the spring, destroying all nesting sites of birds which nest on the ground or in low shrubbery.

Many are called, but few are chosen; ask the man who toots a duck call all day long.

CALIFORNIA GAME REFUGES

THE resident hunting license fee in California was raised by the legislature of 1927 with the provision that one-third of the money so raised was to be used for the purchase of game refuges. Since that time an exhaustive survey has been made and tentative locations selected for refuges suitable for the various kinds of game of the state.

The first refuge to be established from this fund has been selected and consists of 3,000 acres in Merced county and embraces an ideal location for harboring waterfowl. Development is required to supply water for the area as it is needed to promote the growth of aquatic plants suitable for waterfowl food. The locality has been used as a winter resort for ducks and quail from time immemorial. Establishment of a number of other refuges, tentative locations for which have been selected, will follow.

Observance of the law and eradication of sportsmen can evade.

SPORTSMAN A CONSERVATIONIST

SO MUCH is said derogatory of the sportsman that when a voice is lifted in his defense it is worth repeating. The following editorial in the January 13, 1930, issue of the Columbus, Ohio, Evening Dispatch should hearten all sportsmen who are battling for better and saner laws, more intelligent game management, more constructive methods of game restoration:

"Encouraging reports have come from the meeting of the sportsmen's organizations of the United States and Canada, held recently in New York. The reports, covering every section of the United States and Canada and made after careful surveys by local sportsmen's organizations, show that in every state and in every province in which conservancy laws are in effect, wild life is increasing and that in every district which has failed to enact state or local laws, wild life is disappearing rapidly.

"It is customary for those who have not studied the situation to blame the sportsmen for the destruction of wild life and game in this country. The exact opposite is true. The organized sportsmen have become the leaders in every movement tending to protect and to conserve game and fish. They have been the active element in securing protection for game animals, birds and fish in both federal and state laws, and the most active interest in enforcing these laws. They, better than any others in America, know the necessity of protecting our wild life and saving a remnant of our outdoors.

"It is not the sportsman, but the 'sport' and the game and fish hog against whom we need protection. The true sportsman is a natural conservationist."

Keep all your tools sharp. A small pocket stone is handy for touching up knives. An ordinary flat file will put a good edge on your axe.

BIG FOREST LAND PURCHASE

THE largest purchase of lands for state forests and game refuge purposes ever made in Pennsylvania was consummated in January after negotiations extending over a year. The area exceeds 122,000 acres purchased at \$3 an acre, the total cost, including survey and other acquisition expense, being in excess of \$400,000. The land was all purchased from one lumber company and is distributed in eleven counties. It will be allocated, 70,226 acres to the department of forests and waters, and 51,845 acres to the state game commission for refuges and public shooting grounds. Pennsylvania already has 35 primary and 70 auxiliary game refuges, each surrounded by state-owned public hunting grounds, with a total area, including both sanctuary and shooting grounds, of 259,826 acres. The recent acquisition will bring the total acreage of state-owned land devoted to game to 311,671 acres.

Don't get excited or hasty in using a shotgun; be sure you know what you are shooting at before pulling the trigger. Carelessness in handling a gun may mean sure death to someone. Stop, look and listen. Safety first.

SAGE HEN TO FOLLOW THE HEATH HEN?

THE sage hen, at one time one of the most abundant and most popular of the upland game birds found in California, is facing extermination in at least a part of its range, according to a recent report made by Field Naturalist Donald D. McLean of the Division of Fish and Game. A careful survey of conditions in Mono and Inyo counties, recently completed, shows that the sage hen is almost gone in that section.

Breeding conditions in the northeastern part of the state were bad during the last spring, and the birds in that section brought forth few young. Consequently, according to the figures obtained by McLean, covies of from two to four birds were the rule, rather than eight and ten as in the past. In the more remote parts of that section, where few shooters ever disturb the birds, they are present in greater numbers than in any other section of the state.

After an exhaustive study of field conditions throughout the range of the sage hen in California, McLean is convinced that an epizootic disease among the birds or a couple of bad breeding seasons such as the one of the present year, could wipe out the entire population of sage hens in California, and particularly in Mono and Inyo counties.

Somewhat similar conditions prevail in portions of Montana.

Spring Time at the Game Farm

By HAL KIRK, Butte, Montana

SPRING is just about here," said J. F. Hendricks, superintendent of Montana's new upland game bird farm at Warm Springs, as he grinned at the warm sunshine and indicated the preening pheasants in his 200-odd portable pens. "When the pheasants begin whistling like that—hear 'em?"—and here he cocked his head toward a farther covey, whose soft wood-notes were gently rising and falling—"that's their love call.

"We'll have eggs along in early April, if this fine weather holds. Of course, I've never spent a spring on a game farm this high in the Rockies, but at Pendleton in Oregon, where I operated the state game commission's bird farm for five years, we usually had pheasant eggs late in March.

"These imported pheasants might be fooled on the beginning of Montana springtime, because some came here from California and some from Washington, but the birds we snared around here last fall ought to know their stuff. And they're whistling like the rest. We got 24 Hungarian partridges in about three days of trapping here, and they agree with the imported birds.

"We have about 270 here in all just now—220 ringnecks, which are commonly called Chinese pheasants, y'know; 22 purebred Mongolian hens; and the 24 Hungarian partridges. From them all we hope to get several hundred young to grow up to size that can take care of themselves and be liberated in Montana thickets this year.

"The pheasant eggs will be placed under the chicken hens for hatching and mothering of the pheasant chicks, until they're big enough next fall to rustle for themselves. Each brood will have a single pen while they're quite young. We have about 200 wire netting pens; wire over the ceiling, too, so they won't fly out and hawks can't get in. The pens are movable, in panels, so we can seed the ground here to wheat and rye and such green stuff to keep them healthy and happy.

"If we get seven or eight pairings in the 24 Hungarians, we'll say we're lucky, as the Huns mate for life. So, when the pairs are made up and the mating season is on here, we'll turn the unpaired Huns out to find their old mates or new ones among the wild partridges.

"The little Hungarian is the coming upland game bird, seems to me. Of course, I don't yet know conditions this side of Oregon's blue mountains very well, but that's my guess. They take care of themselves the best of all the upland birds we've yet introduced into the northwest.

"They fly fast; they're tricky on the wing—the way they zip and zig-zag makes a difficult wing shot, especially in brush or tall grass; and they're hardy in winter, eating the seeds of Canada thistles and other things that stick up above the snow." So Hendricks

summed up the Huns' good points, adding: "You bet the little Huns are OK as long as the snow crust doesn't get too hard and keep them locked down in drifts where they bed for the night or keep them out of the drifts' protection o' nights.

"When the snow's particularly deep, ranchers and sportsmen who like to conserve the coveys as well as shoot through them, can fix up brush piles for shelters along the gulches and branches of water and put out sheaf grain for them to feed on. Threshed grain scattered out gets covered by wind-drifted snow so often before the birds find it, while stood-up sheaves attract the birds naturally. Pheasants and partridges don't take long to learn where food is put out for them; no, sir.

"Brush piles give the birds some protection to dodge into if a hawk or a coyote comes along. Pheasants and partridges both dislike being too far from some sort of cover.

"When we get around to opening the season on pheasants in Montana, I advocate a law permitting cock birds only," said Mr. Hendricks, speaking from a long game farming experience in Oregon and in studying game law workings elsewhere. "If a hunter is allowed a hen pheasant in his bag, just because he might hit one by mistake in bad light, he may be purposely careless and get more hens than cocks in a day's shooting.

"That applies only to pheasants, that cock bird law, because even growers of the Hungarian partridges can't tell the cock from the hen, except at certain ages in the birds' lifetime."

In Montana's first upland game bird hatchery at Warm Springs are 15 acres, obtained by the State Fish and Game Commission. Whenever more space is needed the hatchery can spread out over the state-owned land adjoining it. The plant at Warm Springs, including Superintendent Hendricks' house and the barns and garage and the ever-increasing number of pens made of panels of wire netting with coop shelters and all, have been built by the Fish and Game Commission for wild life conservation.

After it gets well under way the Commission hopes it will produce 4,000 or more pheasants and Hungarian partridges a year for liberation in the coverts of Montana's hunting grounds, to which come increasingly every season more sportsmen and recreationists from afar.

Dad's Fishin' Pal



Billy Martin

HERE'S another picture that drives home the lesson: "Let every dad make a pal of his lad." Five-year-old Billy Martin, son of Dr. and Mrs. Charles J. Martin of Libby, is shown with nine native trout taken from Crystal Lake near Happy's Inn. Billy is his dad's fishing pal and Bill's dog makes up the trio. Dr. Martin is one of Montana's most consistent conservationists and an active member of the Libby Rod and Gun Club. The picture was submitted by Ed Boyes of Libby.

Lonesome Lake Is Finally Lake

LONESOME LAKE, about seven miles northwest of Big Sandy, is full of water. This is the first time since 1917 that the lake has had a considerable supply of water at this time of the year and this insures water through the summer and fall. Years ago the lake was famous for duck shooting. Hunters from many parts of Montana and distant states came by the hundreds for the opening day of the shooting season and few failed to get a good bag of ducks.

Since 1917 there has not been sufficient water to fill the lake and the best duck grounds in these parts became a barren flat. Warm weather has melted the snow and the water has run into the lake, filling it and discharging down the creek.

Young Wife: "Aren't you the same man I gave some biscuits to last week?"

Tramp: "No, mum, and the doctor says I never will be again."

The University of Out-of-Doors

IN Pope's very engaging Essay on Man, Montana sportsmen who are keenly interested, will find these lines:

"Thus then to Man the voice of
Nature spake—
'Go, from the creatures thy instructions take;
Learn from the birds what food
the thickets yield;
Learn from the beasts the physic
of the field;
Thy arts of building from the bee
receive;
Learn of the mole to plow, the
worm to weave;
Learn of the little nautilus to sail,
Spread the thin oar and catch the
driving gale.'"

The great outdoors is an open book filled with the most fascinating knowledge, yet few men are wise enough to turn aside from the hurly-burly of life to study the truths and beauty written upon its endless pages. The average writer, fairly well versed in mine run of subjects, is appalled at his woeful ignorance when called upon to produce evidence of his acquaintance with nature's great and interesting library. A sense of humiliation comes, too, with the consciousness that this library is free and in these words of Cowper, he stands condemned:

"Beneath the open sky she spreads
the feast;
'Tis free to all—'tis every day renewed;
Who scorns it starves deservingly
at home."

Happy is the man who is wise enough to matriculate in the University of Outdoors. Both mind and spirit find expression and joy from the lessons that nature teaches. If cultivation of mind and spirit were the only rewards to obtain from attendance upon nature's school, the failure to attend would be devastating enough to humankind, but the devastation takes on greater proportions because of the enormous economic reward which the University of Nature offers to those who will go into her grass-carpeted laboratories, her leaf-bowered halls of science and learn the lessons which she has so wisely and deftly written there.

It is only in recent years that we in Montana have come to recognize, even in a small way, the vast storehouse of wealth nature has given to us in the form of wild life.

No statistician can estimate the part birds play in the economics of agriculture. It has been said that men would soon perish if all the birds were destroyed. If you doubt this, go into the fields and watch these winged laborers as they carry on their deadly attack upon vegetable parasites. The farmer pays them small heed, but if he realized that here are his most faithful servitors, working from dawn to dusk without compensation, save an occasional lunch from his grain or a sup-

Russian Requests Wild Life

WHEN the circulation of a magazine such as MONTANA WILD LIFE reaches into the nooks and crannies of the Old World, it's evident that its message of conservation of fish and game is traveling far and wide. Atop the pile of letters from all states of the Union, from libraries and schools, other fish and game departments in the United States and Canada, comes this communication from Zagorsk, Russia. The note speaks for itself:

Zagorsk, 12th February, 1930.
To the Fish and Game Commission:
Please don't refuse to be so kind and good as to send me copies of your 1925-1929 biennial reports and the complete file of MONTANA WILD LIFE for 1929 and to be regularly sent during 1930.

Yours very sincerely,
N. Zverinsky,
Post Office Box 23
Zagorsk (Sergieff) Moscow,
District, U. S. S. R., Russia.

per from his fruit, he would guard them very carefully. To make the farmer aware of the strength of his allies for those who are charged with the responsibility of game conservation. For it is in the farmer's province to do more to aid the protection of game than any one else. The English farmer has come to realize that his game crop is as important as his grain crop. He protects the game and destroys its enemies. Records are kept of the annual output, the number killed, and the shooting is "rented" on a basis of these records. When American farmers come to list game as a crop and "cultivate" it with something of the same care that is given other crops, wild life will take its place among the nation's most important assets.

Aside from the bird's importance in the nation's agricultural program, it is somewhat astonishing to know that the national government estimates the value of migratory fowl killed each year at twenty million dollars. Pennsylvania estimates the value of her yearly game kill at approximately six million dollars. In 1928 in Virginia the records of the state game commissioner show a million dollars' worth of game killed in the state that describes itself as "Nearest the Heart of the Nation."

The states that are exploiting their recreational advantages for commercial gain give special emphasis to such hunting and fishing advantages as are theirs. And wise they are, for when states angle for the sportsman, they may be sure if they get him that they have landed the whale among money-spenders.

Few agree with that Frenchman who defined a fishing rod as a "long instrument whose lesser end holds a small reptile, while the other is held by a great fool." Izaak Walton's views

on fishing strike a more popular chord. Walton declares fishing to be an art worthy the knowledge and practice of a wise man, and makes it the subject of this verse:

"Oh, the gallant fisher's life
It is the best of any;
'Tis full of pleasure and of strife
And 'tis beloved of many."

Consider the fisherman. He is more often than otherwise a contented, peace-loving creature. Wise indeed is the wife who greets with a smile rather than a frown her husband's announcement of a proposed fishing trip. A good angler and a good husband can usually be found wearing the same shirt. At least, whatever else his faults, the fisherman generally possesses a kindly nature. That oft-quoted Biblical command to parents might well be paraphrased to apply to wives of men who yearn for the companionship of the artificial fly—spare the rod and spoil a good husband.

That there is a sort of spiritual tonic for man in the quietude of the wilds must unquestionably be true. Someone who embraces this view has penned these lines:

"Do not ponder about God,
Just take your hat and fishing rod
Down to the purling brook.
Sit beneath the biggest tree,
Acknowledge everything you see
To be His open book.

Gather blossoms as you pass,
Be glad of all the long cool grass,
That bends beneath your knee.
Take these things into your heart,
Never let them live apart,
And God will dwell with thee."

Because, then, of their spiritual as well as physical and economic benefit to man, the fishing resources of a nation should be carefully guarded. Not to sermonize, however, but to offer a few practical thoughts about the treasures of the wilds, was the motive that inspired this article. That being true, there seems no better way to bring it to a climax than with the practical words of Theodore Roosevelt, that practical man who was an honor student in the University of the Great Outdoors:

"There is no other question before the nation of equal gravity with the conservation of our natural resources. It seems to me to be time for the country to take account of its natural resources and to inquire how long they are likely to last. We are prosperous now; we should not forget that it will be just as important for our descendants to be prosperous in their time."

PAY AS YOU GO

Angry Motorist: "Some of you pedestrians walk along as if you owned the streets."

Irate Pedestrian: "Yes, and some of you motorists drive around as if you owned the car!"

Dude Ranchers Invest Millions In State

WHEN commercial captains and leaders of industries from all parts of the state met recently at Helena at the Montana Development Congress called by A. H. Stafford, commissioner of agriculture, sportsmen throughout the northwest were keenly interested in proceedings. These same sportsmen realize that without constant conservation of fish and game the much-vaunted tourist travel would be without a magnet to attract them to the land of shining mountains.

More than \$10,000,000 has been invested in Montana and Wyoming by westerners conducting dude ranches for the entertainment of eastern tourists, according to A. H. Croonquist of Red Lodge, vice-president of the Dude Ranchers' Association, who addressed the Montana Development Congress on "What Montana Has to Offer the Vacation Tourist." Mr. Croonquist urged that the state appropriation for publicity purposes be raised from \$11,500 to \$100,000 per year and predicted that eventually Montana will enjoy a \$100,000,000 annual tourist business and largely increased population.

"Back in a large eastern city there is a family typical of increasing thousands who every year plan vacations. This family we will call Mr. and Mrs. Traveler, son Jack, 20 years, and sister, just 16," said Mr. Croonquist in his address. "They have the time and money to take any kind of a vacation they wish. They write letters everywhere, visit railroad offices, tour and information bureaus, and a few evenings later they start to look through the stacks of literature to decide on a vacation. Only a glance at this printed matter will show you the competition Montana has for the tourist dollar.

"European countries, their hotels and the steamship companies spent millions to get the 300,000 Americans over there last year and these Americans spent \$750,000,000, or two and a half times the amount they paid on war debts. In all this literature we find France has established 690 tourist bureaus here, England direct-mails to all our hotels and even Germany spends \$4,000,000 as a bid for our business, and has sent a man to the states to make connections with tour bureaus, railroads and steamships.

"But not being interested in an European trip this year, our Traveler family files all this away for future reference.

"What's this?" Dad Traveler asks, as he thumbs through a booklet 'Canada, Canadian Rockies,' scenery, fishing. It appeals to him. The whole family looks through these Canadian folders carefully—they are interested. We learn that Canada has recognized the tourist industry and last year got \$250,501,000 from the 14,875,000 tourists who went there.

"Our Traveler family set this Canadian literature aside for future reference, as the Calgary rodeo appealed to Jack, and Lake Louise to Mrs. Traveler,

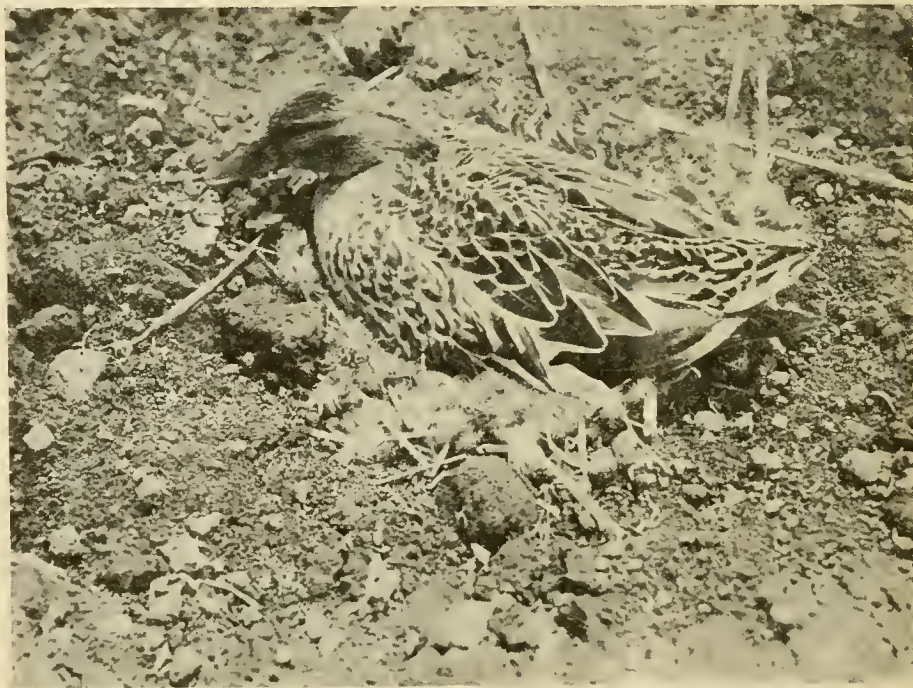
and Dad says returned American tourists are loud in their praise for Canadian hospitality and what they term one of the greatest sight-seeing and sporting countries in the world.

"Now, our dudes look over the lake region and the volumes of literature from Michigan, Wisconsin and Minnesota—beautiful literature, and with an appeal that brought a tourist and resort business of over \$100,000,000 to Michigan, while Wisconsin got over \$130,000,000. Our dudes decided to take a glance through the rest of the literature, passing up Florida, California and Arizona for summer vacations. Mrs. Traveler gets interested in Colorado, mountains, hotels, auto trips, scenery and fishing, and we learn that Colorado and the railroads spent \$1,000,000 for

their \$100,000,000 tourist business last year.

"Just then Jack Traveler picks up a dude-ranch folder and a Montana rodeo book. Sister thumbs through the Northern Pacific dude-ranch book—they see horseback trips, bucking horses, rodeos, Indians—Jack and sister are sold, and they start to tell Mr. and Mrs. Traveler. They tell what they read of the Montana-Wyoming dude ranchers. Jack tells Dad Montana is the third largest state in the Union—so big it takes the fastest train 24 hours to cross it—in fact, it has 5 per cent of the entire land area of the United States and only one-half of 1 per cent of the nation's population—lots of room to roam around. It's a new country, Indians, Indian battle grounds,

Mallard Hen Displays Confidence in Man



—Photo by J. B. Halm, Missoula.
This mamma mallard is shown determinedly sitting on her nest in a plowed field after the nest had been moved three times.

WILD life instinctively looks to man for protection, and unless their confidence is completely broken, these wild creatures, especially birds, will place their trust in man.

It must take a brave heart and unlimited faith for a bird hunted and harassed as much as the mallard is for three months of each year, to sit patiently on her nest while man, known mortal enemy, passes and repasses within a few feet.

This mallard's nest was moved three times by J. C. Meingassner on his ranch near Nine Pipe Bird Refuge. It was

discovered during plowing and with the aid of a shovel was moved out of the way. Later it was necessary to move it again to permit harrowing and again for seeding.

Mrs. Mallard, although shy at first, became tame and readily accepted the nest in its new location each time. Men working near caused her little concern after she found her precious nest was not harmed. She brought off her entire brood of nine hardy ducklings. Many broods in this locality are saved in this manner for the hunters annually by thoughtful farmers.

bear, deer, elk, and forests. During Jack's speech Mr. Traveler has picked up a Montana book and learns of the agriculture, livestock and industrial Montana, and remarks if the family comes to Montana he will investigate these, possibly to invest some of the firm's money out west.

"Jack and sister are all enthused again when they read about Montana's mountains, its trout-filled lakes, its mountain roads and saddle trails—and its 16,000,000 acres of national forests. Jack is excited when he reads of 12,000 elk, the deer, bear, antelope and moose, and thinks of the fun with their motion-picture camera. Mrs. Traveler tells Dad Montana spends \$200,000 a year for propagation and protection of fish and game; that Montana operates 15 fish hatcheries and plants 40,000,000 fish a year in lakes and streams. Surely, he should catch a few in his summer's vacation. Sister tells of the two great national parks and that she and mother could visit both Yellowstone and Glacier in 10 days from any dude ranch, while Dad and Jack go on a pack trip.

"Now that the Traveler family decides to come to Montana they go through the railroad dude-ranch book and the ranch folders, surprised to find more than 100 dude ranches, camps, resorts and hot springs located in the 35,000,000-acre recreational part of Montana. Some have from 100 to 200 guests, while others have the number limited to a dozen people. Some people want plenty of social life, dancing, bridge, and general entertainment, and others prefer less social life and, like the Traveler family, want a few companions at dinner time, and people to invite to their cabin and fireplace in the evenings. Already Jack and Sister suggest that Dad buy them each a saddle horse and outfit.

"With horses in charge of real cowboys, who act as guides, Jack and his sister are planning a pack-train trip. Dad is to join them. The thrill of a pack-train trip, tents, beds, cooking utensils, and all on horseback. Eat in regular cowboy style, from dishes passed out by the cowboy cook. Then from the ranch horseback rides to the neighbors', fishing, hunting, visiting the near-by scenic and historical spots, pink snow and grasshopper glaciers. Mother says she wants to rest part time, to build up for the eastern winter and social season, so she plans to loaf in the bright western sunshine, read, visit and play a little bridge.

"A dude-ranch vacation is decided upon. Dad is pleased, as he does not have to buy the family a lot of new clothes, as on a dude ranch there are no conventionalities or formalities, and you wear your old clothes.

"The grips packed, the Travelers enjoy the luxurious train travel west, and land here in time to see a real western Fourth of July and rodeo show. The first day Jack buys a big hat, cowboy shirt, boots and overalls. Sister sees the dudines on the corral fence, so she too gets a big hat, shirt and cowboy overalls. Mr. and Mrs. Traveler take on these western clothes styles more slowly.

"On the ranch the Travelers were greeted by a group of congenial people from the east, but dressed and tanned like the natives. The Travelers are

surprised and pleased to learn that no other place in the world has a system comparable with that of the dude ranch. Daily trips are planned, from arrival to departure. These dude ranches breathe of the old west, yet provide all the comforts of the new. They take one away from the rush and strain of city life and yet in the most remote places one has every comfort and some luxuries. The days roll swiftly by—a ride every day, a little time around the corrals, on the archery court, rifle range, at horseshoes, or taking part in the contests. In the evening a little program, dancing, bridge, or just visiting with new acquaintances.

"While Mrs. Traveler and Sister visit Yellowstone and Glacier, Dad and Jack with four others are on a pack-train fishing trip. At night, by the campfire on the lake shore, the boss wrangler tells of a young New York dude who came west several years ago for the summer and in the fall wrote his dad about the elk, deer and bear. Like most dudes, he got free with words, so his dad wired him he was entertaining a group of Wall street bankers and to send him an elk. When the young dude got the telegram, he hired a guide and horses, and at sunset the first night he shot the finest bull elk killed in these parts. The animal was skinned the next evening, and the young fellow wired his father: 'Your telegram received yesterday; elk in express today.' This young dude stayed west several years, bought a ranch and a bunch of cattle, while now a Wall street banker still owns, operates and lives on one of the finest stock ranches in Carbon county every summer.

"When the party returned, they visited many hours with the owner of the outfit and learned that the dude-ranch game is an industry in Montana and Wyoming. With the cooperation of the states, railroads and big business, they are spending over \$250,000 this year to create travel west.

"You folks may know more than \$10,000,000 has been invested by dudes in ranches, livestock and industry in Montana and Wyoming. Many of the people who come out as dudes either own and operate or are interested in dude ranches. With an increase of this kind of a vacation these wealthy eastern people just naturally fall into our program of need of capital and population in Montana.

"Two years ago a young man came west for his health. He liked the west, and in the fall refused to return to school. Dad came to see what it was all about and invested \$85,000 in the ranch, cattle and improvements, and this year will spend \$40,000 more for land, stock and buildings.

"Three young dudes bought a ranch and developed it up to \$200,000 and do an annual dude business of \$250,000 a year. Another group of wealthy sportsmen offered \$2,000,000 worth of land to the government for extension of Teton National Park.

"In Jackson Hole last year thirty-one ranches were bought by eastern people. In another section a road bond issue of \$85,000 was taken up by one of the eastern visitors, who had become interested in that section.

"One wealthy Chicago engineer who died last year had requested in his will

that his ashes be scattered from the top of the mountains near where he had vacationed for 20 years.

"Other wealthy eastern people have come to the aid of dude ranchers. In a number of cases they have financed enterprises in the region where they came for a vacation.

"Dude ranchers make excellent immigration departments in Montana and Wyoming in that they bring thousands of people west every year. When they locate on land or invest in our industries, they have the cash, start to invest and give employment to our people. With the state and railroad colonization programs their people have to be financed and carried 10 years or more.

"Montana needs a united people and a united industry, in all an inclusive organization to help industry, business, professions and agriculture, and again I say that one of the quick, sure ways to get people out here—people who can afford to invest in what we have to sell, is through the tourist travel and the dude ranch. If every piece of mail and printed matter that went out of this state had a vacation appeal, and our state publicity appropriation were raised from \$11,500 to \$100,000 a year, we could have a \$100,000,000 tourist business and from these tourists could build up a million population."

Club Kills Wolf

TRAILING a large gray wolf from dawn until almost dark in the evening through more than 60 miles of snow in the Big Hole Basin, forced to dismount and club the ferocious animal to death with a defective rifle after the long trek, was the thrilling experience of Sam Pendergast, young rancher of that section.

Pendergast took up the trail of the wolf at daylight, riding his best saddle animal and leading another. Hour after hour he kept plodding along the trail of the animal, plainly marked in the freshly-fallen snow. It was well toward the middle of the afternoon before the relentless pursuer came in sight of his quarry and for several hours the race was even between the rider and the animal. Towards evening the wolf began to weaken and shortly afterwards the hunter and the hunted were side by side. The wolf then stood at bay, leg deep in the soft snow, and Pendergast aimed. His rifle refused to function.

Not to be outdone, after the long, weary pursuit, he dismounted and, watching his chance, landed a telling blow with the butt of his rifle between the wolf's ears. This first blow stunned the animal and the finish was not long in being enacted.

For the pelt of the Big Hole Basin notorious killer young Pendergast received \$50 and at the same time received the unending thanks of the stockmen of that section.

The animal was said by John Peterson and O. H. Husted, prominent Beaverhead county stockmen, who were telling of Pendergast's exploit, to have been a most persistent killer of range stock.

Sportsmen Aid Fish Conservation

By KENNETH McDONALD, Anaconda Hatchery

NATURE has provided Montana with valuable assets for the perpetuation of fish life. We have every reason to believe that we are taking advantage of them, in part at least, as it is a certainty that fishing is better now than it has been for several years. The law of averages controls this pastime as it does all other lines of endeavor—we can only expect to get out of it what we proportionately put into it.

This law pertains not only to the hatcheries of the state but to the sportsmen as well. The sportsmen of Montana are, as a class, of a high type. They have raised the code of sportsmanship to a higher standard and much is due them for the good fishing we have today.

There was a time when a fisherman was not considered adept at the art unless he would return from the stream or lake with the creel filled, whether he had use for the trout or not. Many times he paid but little regard as to how he got the fish or to the size of them. Now the real sportsman sallies forth to the stream, selects his favorite fly (not flies) and matches his wit and skill against that of the trout. When he has caught what he can use he quits or puts on the barbless hook and fishes, not for the fish but for the fishing and returns the catches to the water content with the satisfaction that he has outsmarted the wily trout.

The real sportsman realizes that the seven-inch fish of today is the seven-pounder of tomorrow. He does not fish the small brooks which are homes of the smaller trout and he looks askance upon any one who does fish such places.

Many fishermen are aiding us materially in reporting places along their favorite streams suitable for planting fish. They are in a better position to know the characteristics of these places—whether they freeze during the winter months, dry up late in the summer, and whether there are any irrigation ditches liable to prove disastrous. All data of this nature is being recorded at the hatcheries and is a valuable source of information.

As for the hatchery end of the game—of late years there have been some beneficial changes made in all stages of the fish cultural work. Some of these changes have been made possible through the "trial and error" system, many through the exchange of ideas

with state or government bureaus and many through scientists throughout the country who have become interested in this work.

The most valuable improvement has been made in the food problem. When it became apparent a few years ago that it would be but a question of time until beef liver, which had been the chief fish food, would have to be replaced due to the great demand, fish culturists all over the country, those engaged in the work commercially, started experimenting with other foods until now there are several which have proven as good or better than the beef liver and in many cases more economical.

The rearing ponds have come in for their share of improvements and wherever practical they are being installed and are proving a big asset, especially in raising fish to a larger size.

New systems of aeration have been devised which have made it possible to carry twice the number of fish in a pond as formerly. Other changes have made it possible to keep a pond absolutely sanitary, thereby reducing to a minimum the possibility of disease getting started among the fish.

With the hatcherymen, fishermen, forest rangers and ranchers making surveys of the streams and reporting good planting places for trout, we are getting some wonderful results.

With the waters ideally suited for trout, the type of sportsman and the hatcheries of Montana, we should never have to resort to the program adopted by some eastern states in planting the adult fish a day or so before the fishing season opens.

Let us all work to the end to keep our fishing where it is today, where a man can catch what he wants and feel content that he caught them by matching his skill against that of a trout raised under natural conditions and in the natural environment where they are constantly on guard against enemies of all kinds, and which requires "reel" science to bring them home.

GO AHEAD

Betty: "Do you have any green lipsticks?"

Drug Store Clerk: "Green lipsticks?"

Betty: "Yes. A railroad man is going to call on me tonight."

He: "Darling, you're the light of my life."

She (not impressed): "But you are furnishing the gas, Mr. Brown."

A Scotchman was building a brick house and he phoned the Masonic Temple for a couple of Free Masons.

ON MOTHER'S SIDE

Small Son: "What are diplomatic relations, father?"

Wise Parent: "There are no such people, my boy."

DAD KNOWS

Father: "Why were you kept in at school?"

Son: "I didn't know where the Azores were."

Father: "In future just remember where you put things."

DIDN'T TAKE A TONIC

"You say he was run down? Did he take a tonic?"

"No, took an ambulance."

Attract Wild Ducks



Natural aquatic food plants will bring thousands of Wild Ducks to your favorite waters. Plant WILD RICE, WILD CELERY, PONDWEED SEEDS and others guaranteed to produce results. Prices reduced, discount on early orders. Write for expert planting advice and free literature.

Wisconsin Aquatic Nurseries

Box 331-D, Oshkosh, Wis.

Better DUCK Shooting



Order Wild Rice Seed Now For Spring Planting. Thousands of ducks will come to an established rice field. We also have wild celery, Sago Pond plant, Wapato duck potato and other attractions for waterfowl and fur bearers. Also parched wild rice for table use.

GEORGE D. HAMILTON'S
Box 16

AQUATIC FARMS
Detroit, Minnesota

Hercules Alaskan Silver Black Foxes

Write for information and prices.

Idaho Fox Farm Co., Porthill,

Idaho, or

Hugo Renlund, Red Lodge, Mont.

FOXES

Pen-Raised Alaskan Blues and Pedigreed Silvers. Order Now—Early Delivery more satisfactory. We guarantee, in Your hands or Ours, 100% increase under ranching contract on adult Blues. 6 Bank Ref. for 25 yrs. and Satisfied customers. Breeder-Agents wanted—Your real opportunity. "One of the World's largest"—Free booklet tells all. CLEARY BROS., Fox Farms, Empire Ridge, MONTANA, U.S.A.



Outstanding

Are the trophies mounted in our shop.

FINS—FURS
FEATHERS

Lentfer Bros.

Successors to
Jonas Bros.

Taxidermists

215 W. Park St.

Livingston, Mont.

Phone 337-W

Count 160 Deer In Blackfoot Region

ATEN-DAY snowshoe trip through the Big Blackfoot country has just been completed by Deputy Game Warden Thomas O. Peasley and Forest Ranger McKnight to obtain a definite record of conditions of game on the winter range. Such information is necessary in preparation of a constructive plan of management of game in the Lincoln territory. A joint examination by the State Fish and Game Commission and Forest Service was agreed upon, since control of some of the best winter game range is divided between the Forest Service, state and private owners.

General snow conditions, according to reports by Lincoln residents, were about normal. On the flats around Lincoln there were from 15 to 20 inches, with an average of perhaps 18 inches. Some of the open south hillsides, such as "Cannons" haystack, exposed to wind and sun, have snow covering of 5 to 12 inches. The snow is well packed and crusted, except at higher elevations and on north slopes where snowshoes were necessary.

The examiners sighted about 160 deer. Most of these were rather wild and appeared in strong, thrifty condition. An unusually large number of 1929 fawns were observed, particularly in the canyon below Lincoln.

Two deer carcasses were found with indications that the kill had been made by mountain lions or coyotes. One mountain lion track was noted, but the signs of coyotes were less abundant than had been expected.

A portion of the hay put out by the Fish and Game Department along Poor-man Creek soon after the intensely cold period of January was still in evidence, indicating that the deer preferred their regular diet of mountain laurel, juniper brush, service berry, wild rose and other natural browse. Places were found where these plants were eaten apparently in preference to available bunch grass on some of the nearly bare slopes, especially in the canyon.

A few elk were found wintering on Alice Creek, and were in good condition. None were observed in the Silker King ridge country. It was reported that a considerable number of elk was wintering in the lower country on the Dearborn side of the range. It is expected that these will drift back to the

Alice Creek and Lander's Fork country as the snow settles.

Further observations on game conditions will be made in April, which sometimes proves under unfavorable weather conditions to be a trying period for game animals. Barring unusual conditions, however, game on the upper Big Blackfoot promises to come through the winter in fair to good condition, according to the report.

Coyote Hunter Claims Laurels

APRAIRIE-going car, an expert driver and a straight-shooting assistant with a few good dogs can kill more coyotes than any other combination thus far devised, in the opinion of H. W. Matz who has hunted coyotes off and on for 22 years and the last seven years in particular. Arriving at Great Falls recently with 162 coyote pelts which he said he obtained in northern Montana last fall and this winter, Mr. Matz claimed a new record for coyote slaying.

"The 162 coyotes were killed in 68 days," said Mr. Matz. "Of this total 108 were killed in October. I therefore claim the championship for coyote killing in Montana."

Mr. Matz has records showing he has killed more than 660 coyotes in the last seven years. This record shows 46 in 1923, 76 in 1924, 81 in 1925, 67 in 1926, 92 in 1927, 139 in 1928, and 162 in 1929-30. He expects to get several more this year.

Many of the coyotes were shot with

a shotgun by the assistant who rides with Mr. Matz in the special car he has developed, he said. The car is a model T Ford that has had many devices added designed to give it more speed. It has a special cylinder head, oversize tires, carburetor designed for speed, and various other special things. It will travel from 60 to 70 miles an hour and its prairie cruising speed is from 40 to 50 miles an hour. As the fastest of coyotes seldom run faster than 40 to 50 miles an hour, this cruising speed is sufficient to overtake the animals.

The special car is equipped with a box on the rear that will hold up to four dogs. When the occasion demands, the car is stopped when a coyote is sighted, the dogs loosed and the chase resumed.

THE HOME RUN GIRLS, AS IT WERE

She (tearfully): "I'm going home to mother and I never want to see you again."

He: "Too late; your mother went home to grandmother last night."

Help the Cause!

Subscribe Now!

To the Editor, MONTANA WILD LIFE,
State Capitol Building,
Helena, Montana.

Please send MONTANA WILD LIFE to the following addresses for one year, beginning with the next issue after receipt of this order. Check is enclosed to cover these subscriptions at \$1 each:

NAME

Address

NAME

Address

NAME

Address

NAME

Address

NAME

Address

MONTANA WILD LIFE

Official Publication of the Montana
State Fish and Game Department



TROPHIES of the FALL HUNT

Realistically mounted perpetuate the life-likeness of the specimen as well as the thrill of the experience.

Art catalog with reproductions of famous mountings FREE on request.

Jonas Brothers

Master Taxidermists

1036 Broadway

Denver, Colorado

WANT MORE DUCKS



More food means more game. Complete line of planting materials suitable for Montana. Planting helps free. Write



TERRELL'S

AQUATIC FARMS AND NURSERIES
1072 W BLK. OSHKOSH, WIS.

Montana Sportsmen's Association

ANNUAL MEETING IN APRIL

PREPARATIONS for the annual meeting of the Montana Sportsmen's Association are getting under way. The meeting, which is to be held in Helena in April, will be announced through MONTANA WILD LIFE and newspapers of the state as soon as Glen A. Smith, chairman of the group, returns from Washington, D. C.

Several matters of importance will be taken up at the meeting. It is well known among sportsmen that many rearing ponds are necessary if trout and other fish are to be maintained in numbers sufficient to make good fishing. To build these rearing ponds a good deal of capital is required, and some method of getting this money will be discussed.

Other things of importance include work on migratory bird refuges; the establishment of free public camp grounds beside lakes and streams of the state; the purchasing or leasing of public shooting grounds; the inculcation of a high standard of sportsmanship among the youngsters of Montana; the discussion of amendments to the existing game laws.

In the last named discussion the chief points of interest will be the need for changes, there existing at present an opinion that the laws now on the statute books are adequate in most instances. But the matter will come up.

All clubs of the state are urged to send representatives to the meeting. Notify the secretary of the state body, whose headquarters are at Missoula, if your club will send a delegate.

NEED MORE REFUGES

NEEDED for more Federal migratory bird refuges in Montana is apparent, says George E. Mushbach of Billings, United States Game Protector for Montana and Wyoming. The location of these refuges is one work that local rod and gun clubs could aid materially in, says Mr. Mushbach. Such areas, which will be purchased by the government, should contain not less than 10,000 acres. The location of them should be such that the land could be made into a marsh, and kept wet easily. A continuous supply of running water is desirable for this purpose. High priced land is, of course, out of the question. But there must be areas, especially in the eastern part of the state, where such refuges would be practicable. A communication addressed to the secretary of the state association would be cared for and promptly forwarded to Mr. Mushbach.

CLUBS TALK BUCK LAW

TEDDIE MARTIN of Alberton, secretary of the rod and gun club there, writes that he will make every effort to attend the annual meeting of the state association. The Al-

My Dad

MY DAD, he tells how he used to be
The best ball player in his town,
And the biggest man he ever did
see
Couldn't wrestle him down—
And Mother, she just smiles.

My Dad, he tells how he used to shoot
At deer with a muzzle-loading gun,
And how he used to fish, to hoot—
And never came home with only one—
And Mother, she just smiles.

My Dad, he tells that he never went
With a girl till he met Mother,
And that he never spent a cent
Or a minute on any other—
And Mother, she just smiles

berton club will have several matters of importance to bring up at the meeting. It is understood. The buck law and its application to western Montana is one of them.

CASCADE AFTER ELK

A PLANT of elk in the Cascade country is to be requested by sportsmen of Great Falls and Cascade, it was learned recently. Sportsmen of that territory say there is a considerable area there that could be used by elk without detriment to ranchers or to crops.

STUDY STREAM POLLUTION

WORK preliminary to a stream pollution study in the Missoula River has been started by the Western Montana Fish and Game Association of Missoula. The group has interested the Kiwanis, Rotary and Lions Clubs of the city, as well as the Chamber of Commerce, and will make a comprehensive study of conditions. They will be assisted by Deputy Game Warden W. A. Hill, acting under directions of Chairman Thomas N. Marlowe of the State Fish and Game Commission.

HAMILTON MAN COMING

THE Hamilton Rod and Gun Club will have a representative at the April meeting of the Montana Sportsmen's Association, it was indicated when F. J. O'Donnell, president of the club, called the state secretary and asked him to speak at a meeting in Hamilton March 24. The Hamilton club has long been one of the prime movers for conservation and use of game and fish in western Montana.

PLAN REARING PONDS

REARING ponds and more game birds are contemplated by the Flathead Game Protective Association, although Howard Knapp, secretary, says the game law violator is the worst problem the Kalispell sportsmen have to deal with.

TROUT AT BROWNING

AN extensive program of trout planting is the goal of the Browning Rod and Gun Club, a meeting held early in the month with the state secretary showed. This program will restock 600 miles of trout streams and 100 lakes in Glacier county, which is more heavily fished than any other place north of Helena, it is believed. The club will send a delegate to the state meeting next month, and will come with a map that shows the conditions as they exist on the Blackfeet reservation. Frank Sherburne is president of the club and J. A. Medaris is secretary.

MEETING AT GREAT FALLS

DISCUSSION of the Sun River elk herd, stream pollution, loss of fish through irrigation ditches and other matters were taken up March 3 when the governing board of the Izaak Walton League chapter of Great Falls met with the secretary at Great Falls. A clearer understanding of the situations was reached by both sides.

STANFORD CLUB JOINS

STANFORD sportsmen again showed their faith in the Montana Sportsmen's Association when they voted to come into the association again. The meeting of the rod and gun club was held March 4, with A. C. Baumgartner and S. C. Rumford of the Great Falls Izaak Walton League chapter and the secretary of the state association as guests of the club. A need for more rearing ponds and more adequate game protection was expressed by the club members.

NEW CLUB AT SHELBY

THE Toole County Sportsmen's Association was organized at Shelby March 5, when the state secretary met with the Lions Club of Shelby. Twenty-six members signed up the first night, and named Lee Yealy as temporary president and Clifford D. Coover as temporary secretary of the club. At the first regular meeting of the club March 12 Jean Gerlough of Shelby was chosen president; W. Ray Walker, of Devon, vice-president; G. R. Smith of Shelby, secretary-treasurer. Directors are John Mars, Sweet Grass; Ray Sorrell, Kevin; H. Abbott, Sunburst; Riley Robinson, Gold Butte; R. C. Kline, A. E. Deaton, Oilmont; L. R. Donaldson and M. B. Chandler, Shelby. Deputy Warden W. C. Gird of Browning attended the meeting.

"I see this medicine is good for man or beast."

"Yes," said the druggist.

"Gimme a bottle. I believe that is the right combination to help my husband."